

PATENT  
4747-124C1N1

**In the Drawings:**

Subject to approval of the examiner, Applicants intend to make the following changes to sheets 15, 16, 17 and 18 of the Drawings of record.

**Sheet 15 (Fig 10A)**

Times should be in micro seconds (mu not u)

Capacitor 208 should be 100 pico Farad (pF not pK)

**Sheet 16 (Fig 10B)**

Capacitor 260 should be 0.1 micro Farad (mu not u)

Reference 254 should be deleted from op amp 242

**Sheet 17 (Fig 10C)**

The text above resistor 270 should read – R1 AND C1 HAVE A CORNER FREQUENCY OF 20Hz – (20Hz not 200Hz)

Unconnected terminals X, 4 and 8 of XU1B should be deleted

Capacitor 272 should be 0.1 micro Farad (mu not u)

**Sheet 18 (Fig 10D)**

Unconnected terminals X, 4 and 8 of XU2B should be deleted

Capacitor 284 should be 1.0 micro Farad (mu not u)

Capacitor 286 should be 0.01 micro Farad (mu not u)

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On August 31, 2005, Applicants' former attorney, Mr David Morse, conducted a telephone interview with Examiner Dole. The anticipation rejection of claims 1, 3-5, 8, 10-12, 14-19, 29-31, and 32-46, based on the Teodorescu reference, was discussed. In particular, the discussion surrounded whether or not the Teodorescu reference discloses an operational amplifier operated as a unity gain follower. The Teodorescu reference discloses a buffer amplifier which conveys a signal from the sensor to the detector. The Examiner reasserted that "conveyance" of a signal implies unity gain and that the one obvious way to implement a buffer amplifier with unity gain is in an emitter-follower configuration. No agreement was reached with regard to the anticipation rejection.

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### Remarks

The newly submitted and amended claims are directed to various aspects of the invention (both separately and in combination) which are particularly advantageous when used to process time varying signals such as may be representative of low frequency changes in capacitive load such as may be caused by a waving hand in proximity to an antenna. In particular, these amended claims are believed to patentably distinguish not only over the prior art of record, but also over the presently pending claims of co pending application No. 10/938,927. However, nothing in this Amendment should be construed as an admission that any of the previously presented claims failed to patentably distinguish over the art of record, or that any presently presented claim limitations (or combinations of such limitations) are taught by the art of record., and in that regard Applicants reserve the right to argue the patentability of those claims and claim limitations in other amendments to this application and in other applications.

Support for the various limitations now recited in amended claim 1 may be found in the Specification and Drawings as originally filed. In particular, details of an exemplary antenna and its associated fixed and variable time constants for the particular case when the external capacitive load is a hand of a person in proximity to the antenna are to be found in paragraph [0099], and details of an exemplary oscillator circuit for producing a periodic charge to the antenna and the resultant exponential waveform are to be found for example in paragraph [0096], it being noted that  $9 + 16 = 25$  mu sec is greater than 13 mu sec. Similarly, details of an exemplary detector circuit including a peak averaging capacitor 250 are shown in the drawing in Fig 10B, it being noted that the resultant detection signal is shown in Fig 10C as being fed via the "low-pass filter" to the "amplifier with gain and offset" of Fig 10C and thence to an exemplary "auto-compensate" capacitor (284) of Fig 10D. This "auto-compensate" functionality is further described in as paragraph [0107] as providing increased sensitivity to transient signals representative of a waving hand in proximity to the antenna. Note that all the foregoing references to paragraph numbers are to numbering in the published version of this application.

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The amendment to the Specification merely conforms the description to the Drawings as originally filed. In particular, "Fig 9A" was simply a shorthand reference to the A-labeled portion of Fig 9.

Support for the proposed correction of the corner frequency in Fig 10C is found in paragraph [0105] of the published specification. The other proposed drawing corrections should be self-explanatory.

In summary, the claims as presently presented are believed to define various new and useful inventions that are not obvious from the prior art of record, and upon entry of the foregoing amendment and approval of the proposed Drawing changes, this application should now be allowable. If the examiner is of the opinion that minor issues remain that could possibly be resolved in an informal telephone interview, he is invited to contact the undersigned at (213) 892 9315.

Respectfully submitted

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